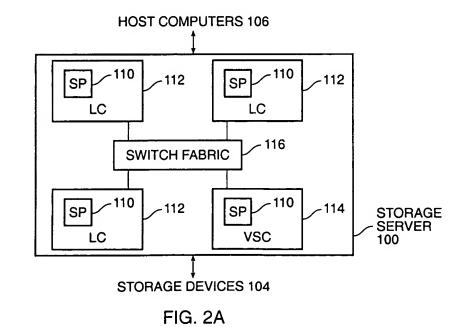


FIG. 1

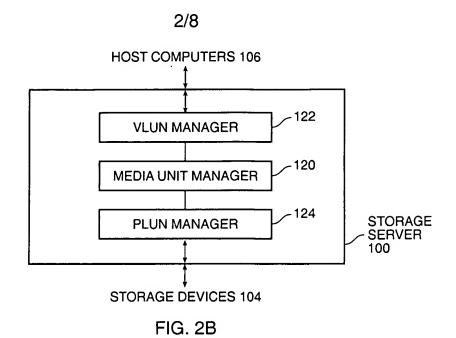


Inventors: Nilesh Shah et al.

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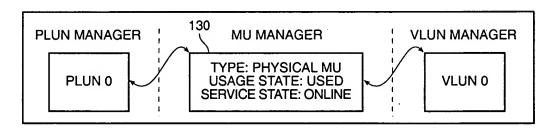


FIG. 3

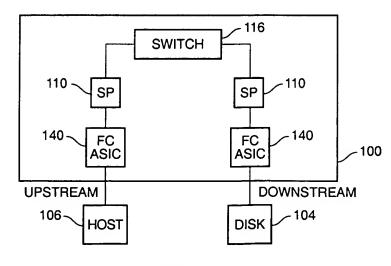


FIG. 4



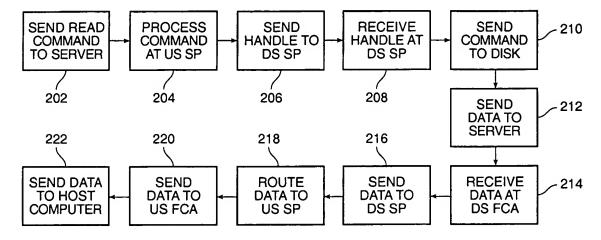


FIG. 5

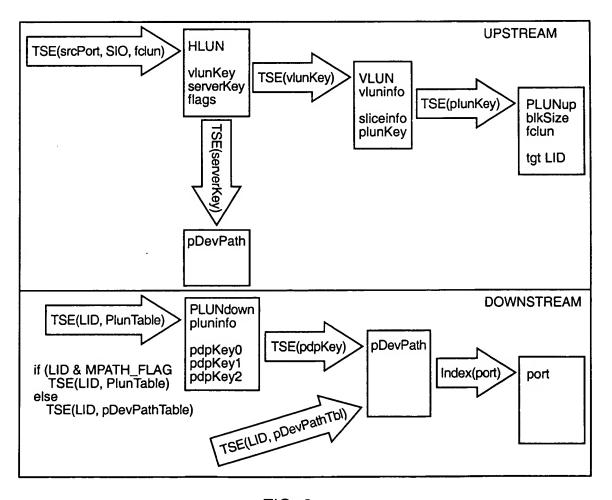


FIG. 6

4/8 **DST** SRC FCA **FCA** QID DMU DSU QID DMU DSU TB TB rsv rsv port port 2b 16b 5b 11b 4b 16b 5b 11b 2b 4b 2b 2b 2B 2B 2B 2B 1B **1B** 5B 5B

FIG. 7

10B

310

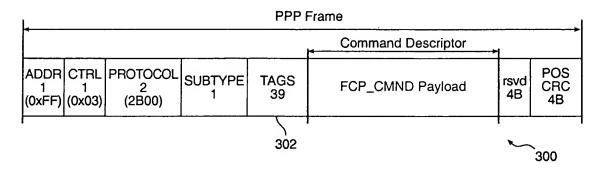


FIG. 8

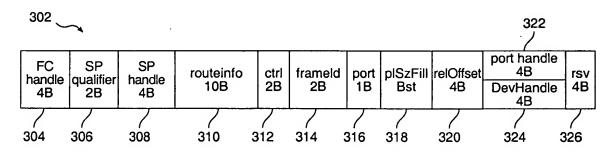


FIG. 9

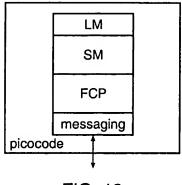


FIG. 12

Inventors: Nilesh Shah et al.
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+			5/	8				
	UPSTREAM EGRESS STATUS (6)	FCP 1. Look up loCB	SM 1. Build response code				FCP 1. Ship to server status 2. Deallocate IoCB	
DOWNSTREAM]	DOWNSTREAM INGRESS STATUS (5)	FCP 1. Look up loCB 2. Ship to up- stream status 3. Deallocate loCB						
INGRESS EGRESS 3,5 †	UPSTREAM EGRESS DATA (4)	FCP 1. Look up loCB	SM 1. Update byte counts				FCP 1. Ship data out to wire	c
9,	DOWNSTREAM INGRESS DATA (3)	FCP 1. Look up loCB	SM 1. Update byte counts				FCP 1. Ship data upstream	TIG. 10
UPSTREAM INGRESS EGRESS	DOWNSTREAM EGRESS COMMAND (2)	FCP 1. Allocate loCB 2. Save srcBlade from FCB 3. Respond with loCB handle back to	upstream	LM 1. Depending on pHandle MCAST bit, look up the PLUN OR look up pDevpath 2. Look up pDevpath if	3. Look up OWN FCPORT table 4. Update return registers for FCP to indicate target D_ID and source S_ID		FCP 1. Update the FC header 2. Send command frame out to wire	
J.	UPSTREAM INGRESS COMMAND (1)	FCP 1. Allocate loCB 2. Copy loCB header to scratch 1 3. Extract ownid, peerid into loCB	SM 1. Look for hLun (SID, FCLUN, port) 2. Save startLBA, numBlks	LM 1. From HLUN, look for VLUN 1. Find affected PLUN slice and insert the phandle into frame header	2. Insert target blade into FCBpage 3. Insert target E-DS or target DMU 4. Updates startLBA, numBlks	SM 1. Build CDB in datapool	FCP 1. Send command frame downstream	

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6/8 server status
2. Deallocate loCB 1. Look up loCB DOWNSTREAM : DOWNSTREAM : UPSTREAM EGRESS : INGRESS : STATUS (5) : STATUS (6) response code 1. Ship to 1. Build 1. Look up loCB 2. Ship to status 3. Deallocate loCB **DOWNSTREAM** upstream 1. Update byte 1. Ship data out to wire INGRESS EGRESS 1. Look up loCB counts 1. Update byte Ship data downstream UPSTREAM INGRESS DATA (4) 3,5 1. Look up loCB counts FCP 1. Look up loCB
2. Send
XFER_RDY
upstream with DOWNSTREAM XFER RDY (3) 3a, 6 command handle INGRESS EGRESS 1. Send command 1. Allocate loCB
2. Save srcBlade from FCB a path Save pLun and pathindex into loCB Look up the PLUN and pick UPSTREAM INGRESS : DOWNSTREAM frame out to wire COMMAND (2) 1,4 UPSTREAM EGRESS FCP Ri 1. Look for hLun (SID, FCLUN, port) 2. Save startLBA, Get pLun and insert Allocate loCB
 Copy loCB header frame header 2. Insert target blade frame downstream into FCBpage 3. Updates startLBA, to scratch 1
3. Extract ownid, peerid into loCB the pHandle into 1. Send command 1. Build CDB in COMMAND (1) numBiks numBlks datapool

FIG. 11

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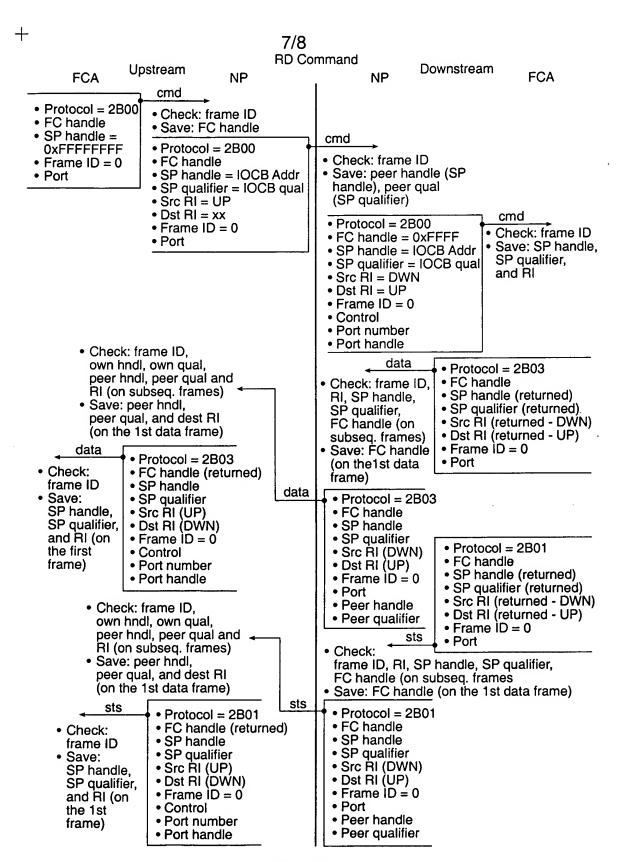


FIG. 13

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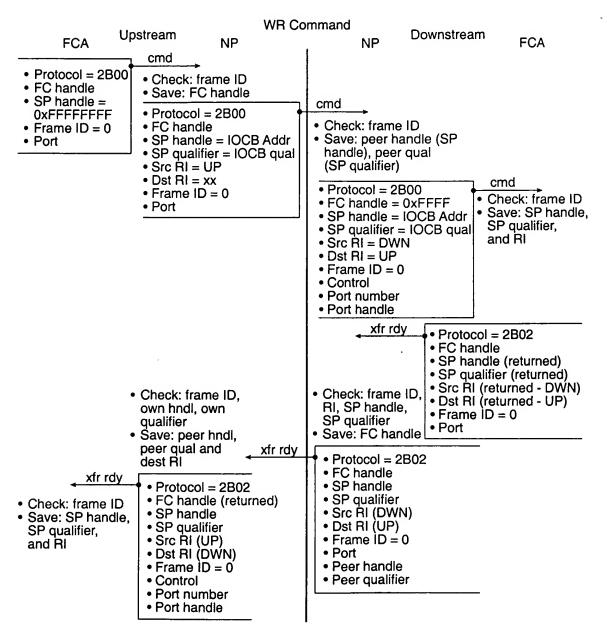


FIG. 14